

REMARKS/ARGUMENTS

The Office Action dated March 18, 2007 and the Advisory Action dated June 7, 2007, have been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 3, 5-11, 13-21 and 23 are pending in this application.

The claims have been amended to clarify that the upstream and downstream balances are monitored via the wireless network. Hence, such amendment excludes a unit attached to each subscriber's device that monitors the account balance.

Claims 3, 5-11, 13-21, and 23 were previously rejected under 35 USC 102(a) as anticipated by Kiel (2003/0027549).

The present claims are directed to a computer implemented method for regulating data consumption in a wireless network. Hence, as the title of the instant application suggests, the claims allow enforcement of a network service level agreement, the service being the amount of data allowed to be transmitted for different subscribers of the wireless network. The tracking for such enforcement occurs via the wireless network.

Kiel is directed to a *prepaid* subscriber system with accounting done on each subscriber's system. The system blocks access to the network when the subscriber's *prepaid* account is depleted. Kiel states at page 2, paragraph 0022, that his invention is fundamentally different from others in that "rather than continuously monitoring the communications activity of a client *by utilizing central system resources* the activity is recorded by an activity-monitoring unit that is installed on the client's communications device." (Emphasis added.)

Importantly, although Kiel may have a plurality of subscribers, each subscriber has its own unit attached to its own device. Thus, Kiel does not monitor a plurality of subscribers *on a wireless network* as claimed. Each unit of Keil records usage for that individual and simply shuts access down when the prepaid limit is expired.

In other words, the instant claims allow a plurality of subscribers to be monitored and their bandwidth adjusted *via a network* whereas Keil monitors a plurality of users *via individual units* attached to the user's computer similar to a prepaid calling card. See paragraph [0024] where Kiel discloses that his system is particularly applicable to cellular telephone systems. If

the credit has been exhausted, the bandwidth is not restricted (made slower) – service is simply cut off. See Keil paragraph [0021].

Keil paragraph [0026] merely recites different ways monitoring may take place by each activity-monitoring unit and ways that the activity-monitoring unit may monitor commercial transactions, for example. The prepaid services may allow a certain amount of time or transmission of a certain amount of bytes – for instance, if 30 hours of computer time is allotted, when the 30 hours is used up, the service is terminated. Thus, Kiel simply monitors activities and when, based on billing rules, the prepaid account is depleted, Kiel blocks all communications activity of the client itself. Kiel *does not contemplate nor impose bandwidth limitations*.

In contrast to Kiel's system, the claimed method operates on monitoring a plurality (e.g. thousands) of subscribers via a network. Multiple specific bandwidth rates can be set based on upstream and/or downstream balances of the plurality of subscribers. Hence subscriber A may have imposed bandwidth A1 or bandwidth A2 depending on his account balance, whereas subscriber B may have imposed bandwidth B1 or bandwidth B2 depending on her account balance. Thus, the claimed method provides *bandwidth control* (rate of data transferred allowed) and does not indiscriminately block all traffic.

For example, the thresholds may be set so that if a user exceeds 5GB on the upstream in a week, s/he could be restricted to 100Kbps on the upstream. Simultaneously, s/he could be restricted to 200Kbps on the downstream if 7GB of downstream traffic were received in a week. And, at the same time if s/he bursts to exceed 20 MB in an hour on the downstream, s/he could be restricted to 50Kbps until the average burst is lower than 20Mbps per hour. A similar different burst rate could be applied to the upstream. Further, the claims allow for multiple levels of thresholds. A user may be limited to 100Kbps for exceeding 5GB in a week on the upstream, and if s/he exceeds 6GB, s/he could be limited to 10Kbps. Thus, the claimed method can provide multiple levels of thresholds and penalties; and can have different penalties running simultaneously in each direction and in both directions simultaneously with burst overlaying them. This is quite different from Kiel's blocking network access (not bandwidth!) when the prepaid amount is exhausted.

Kiel does not automatically release the access restriction unless the subscriber has paid more into the prepaid account. Moreover, Kiel does not provide upstream, downstream, and

usage information to the user upon request. (Instant claim 10, for example.) Kiel simply notifies the user that s/he is blocked if s/he has exceeded the prepayment amount.

In sum, Kiel does not provide for an upstream account and a downstream account which may be tracked for different predefined levels. Kiel does not provide multiple bandwidth limitations/penalties per subscriber (which operate simultaneously). Kiel does not automatically restore users' bandwidth based on time of day and current network congestion level (claim 14) or time, (claim 16) only on payment.

1) In the claimed method, upstream and downstream balances are monitored in order to track the wireless network data consumption (amount of data being consumed) of each subscriber. See, for example, claims 3 and 21. This monitoring of the consumption of the data is not the same as monitoring an absolute account balance.

2) When consumption of a subscriber exceeds certain defined levels, the consumption rate (bandwidth) is limited by imposing bandwidth restrictions. This is unlike Kiel which blocks access to the network when the user has exhausted his paid subscription (similar to a prepaid calling card). Bandwidth is a data *rate* supported by a network connection or interface. One most commonly expresses bandwidth in terms of bytes per second (bps). Imposing a more restrictive bandwidth would be slowing down the network connection, such as allowing 56 Kbps instead of 64 Kbps. Imposing a bandwidth limitation will slow down the amount a subscriber may consume (data sent via the network).

3) When the consumption of a subscriber falls below a predetermined level, the system may automatically adjust the rate allowed (wireless network data consumption). Kiel's billing rules, on the other hand, just re-enable the client access after further payment is made.

4) The claimed method allows for different levels of service dynamically per subscriber based on that user's real-time usage - in real time.

5) The claimed method can allow an increase in subscriber's bandwidth since the adjustments can increase or decrease based on the levels reached. The claimed method can also automatically adjust rates in real-time in both exceeding and then dropping below levels. These adjustments can be made real-time - they can occur in fractions seconds in each direction. Kiel simply turns access on or off.

Kiel does not teach each and every element of the instant claims. Reconsideration is respectfully requested and a favorable action on the merits is solicited.

CONCLUSION

In view of the above remarks, this application is in condition for allowance.


The Commissioner is authorized to charge our Deposit Account No. 19-0733 for any fees associated with this paper or application. A duplicate copy of this sheet is enclosed for accounting purposes.

Respectfully submitted,

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Date: June 17, 2007

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